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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/997,154	11/28/2001	Michael Cole	602-1475.1	4000

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EXAMINER

GORDON, BRIAN R

ART UNIT PAPER NUMBER

1743

DATE MAILED: 11/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/997,154

Applicant(s)

COLE, MICHAEL

Examiner

Brian R. Gordon

Art Unit

1743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 61-66 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 61-66 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120.

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/508,215.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 09/508,215 filed on March 08, 2000.

Specification

1. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

The following guidelines illustrate the preferred layout and content for patent applications. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

The following order or arrangement is preferred in framing the specification and, except for the reference to the drawings, each of the lettered items should appear in upper case, without underling or bold type, as section headings. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) Title of the Invention.
- (b) Cross-Reference to Related Applications.
- (c) Statement Regarding Federally Sponsored Research or Development.
- (d) Reference to a "Sequence Listing," a table, or a computer program listing appendix submitted on compact disc (see 37 CFR 1.52(e)(5)).
- (e) Background of the Invention.
 1. Field of the Invention.
 2. Description of the Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) Brief Summary of the Invention.
- (g) Brief Description of the Several Views of the Drawing(s).
- (h) Detailed Description of the Invention.
- (i) Claim or Claims (commencing on a separate sheet).
- (j) Abstract of the Disclosure (commencing on a separate sheet).
- (k) Drawings.
- (l) Sequence Listing, if on paper (see 37 CFR 1.821-1.825).

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

3. The disclosure is objected to because of the following informalities: The specification contains British spellings of such words as analogue (analog), characterised (characterized), and others. The English spellings of words should be used throughout the specification.

The reference numerals are included within parentheses on page 13, and are shown without parentheses on other pages. Applicant should be consistent with the representation of the numerals throughout the specification.

On page 13, paragraph 4, last line, microtitre plate is designated as numeral (20) and on page 17 paragraph 4 first line as numeral 40.

On page 14, last paragraph, line 4, reference numeral 19 designates metal screen and in Figure 7 the load cell.

On page 17, second paragraph, line 2 reference numeral 9 designates aluminum base and on page 13, first paragraph, line 3 the pipe.

Appropriate correction is required.

Drawings

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 29 and 42. A proposed drawing correction or corrected drawings are

required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description:

18. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 61-66 are rejected under 35 U.S.C. 112, first paragraph, as it is unclear if applicant intends to limit the apparatus as well as the method.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 61-66 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In the claims, applicant fails to distinctly point out or draft the claims in a format in which the elements comprising the apparatus are clearly claimed. It is unclear where

the preamble of the claim ends for there is no transitional phrase (comprising; consisting of) used in the claim.

Generally the claims are formatted as: An apparatus for supporting microtitre plates, each containing a plurality of liquid samples, for evaporation in a centrifugal evaporator, the apparatus comprising

Applicant's apparatus claim(s) more so address process limitations of how the apparatus is intended to be used. It is not clear what elements applicant claims/considers as comprising the apparatus.

Does applicant intend for the microtitre plates, centrifugal evaporator, supporting frame, and trays to be considered as elements of the invention?

It appears as if the embodiment that applicant intends to claim is support in the specification beginning on page 16 at the heading "Heating multiple sample blocks." The examiner has therefore interpreted claims 1 and 65 in light of the specification and for the purpose of examination views claim 1 as a device comprising a frame and a plurality of trays, wherein said trays extend across the frame, wherein the trays include a region formed with an upstanding portion that defines a platform.

The examiner fails to the specific mentioning of the term "frame" within the specification. Therefore it is unclear how applicant intends to structurally define "the frame". If the term has not been specifically defined in the specification, the claims must be amended to clearly define the invention in relationship to the defined terms used. For the purpose of examination, the examiner assumes that the "frame" is actually the "base and ends 29, 30, and 32" (as given on page 17, second complete paragraph).

As to claim 63, the device has been interpreted as a centrifugal evaporation apparatus for heating and rotating a plurality of mounted samples during an evaporation process, the apparatus comprising a chamber in which the samples are heated and rotated, a frame in said chamber supporting a plurality of trays; a plurality of sample plates further comprising said plurality of samples contained in a plurality of wells or other containers; and a means for heating the support frame; and a means for rotating said frame; wherein said sample plates are supported on said trays and said frame and trays are comprised of a highly conductive material.

The examiner has interpreted the claim as comprising a means for rotating the frame however no such means has been clearly claimed.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 61 is rejected under 35 U.S.C. 102(b) as being anticipated by Hanaway US 4,643,879.

Hanaway discloses tower assembly for supporting a plurality of specimen trays for use in an automated analyzing system such as incubator. Each specimen tray comprises a container tray for holding a plurality of specimens. The tray assembly 17 is comprised of a container tray 18 (microtitre plate) having a plurality of microcuvettes 19

arranged in a spaced apart grid-like pattern. The container tray 18 is best shown in FIG.

3. A cover member 20 is adapted to seat over a top surface 21 of the container tray 18.

Referring again to FIG. 2, it is apparent that the tray support tower 11 is adapted to support a plurality of tray assemblies 17. The exact number of tray assemblies 17 may be set as desired. Each tray tower 11 is readily removable from the automatic specimen analyzing system 10 by loosening tie down bolts 34. This allows the tray tower 11 to be releasably connected to the automatic specimen analyzing system.

Each tray assembly 17 rests upon a shelf 35 (tray) which is slidably supported so that it is removable in a first slot 36 in each of a first sidewall 37 and a second side wall 38 (frame) of the tray tower. The slots 36 extend in a spaced apart, generally parallel, manner from a first open face 39 in the plane of the drawing to a second open face (not shown) behind the first open face 39. The slots are closed at an end adjacent one of the open faces as will be described in greater detail hereinafter. Each of the shelves 35 is removably supported in the first slots in each of the first and second side walls 37 and 38 to provide a spaced apart parallel and overlapping array of shelves 35 with the spaces between the shelves being adapted to receive the specimen tray assemblies 17.

If it is desired to sterilize the tray tower, the specimen tray assemblies 17 are removed from the tower. The shelves 35 can also be removed from the tower and sterilized if desired. The tower itself which comprises essentially the **frame** comprising top and bottom portions 45 and 46 and side walls 37 and 38, can then be sterilized also.

Claim Rejections - 35 USC § 103

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4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claim 6~~1~~ is rejected under 35 U.S.C. 103(a) as being unpatentable over Hanaway US 4,643,879.

Hanaway does not specifically recite that the frame and trays are formed from aluminum or copper.

It would have been obvious to one of ordinary skill in the art to recognize that the incubation analysis system of Hanaway may comprise an aluminum frame and trays. It is well known and conventional in the art to use metals such as aluminum to manufacture incubation systems for the material is allows for heat to be efficiently distributed to samples in the containers.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

11. Marraffa, Stevens, Peterson, Alneng, and MacKelvie disclose storage devices for different articles.

Tamaoki et al., Griner et al., Butts, Titcomb et al., and Lund et al. disclose devices for heating containers.

Schwartz et al. and Knebel disclose mutiwell plates.


Viot et al., Hutchins et al., Masterson et al., Armes et al., disclose devices for stacking articles.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian R. Gordon whose telephone number is (703) 305-0399. The examiner can normally be reached on M-F, with 2nd and 4th F off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 703-308-4037. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

BRG
October 29, 2003


Jill Warden
Supervisory Patent Examiner
Technology Center 1700